# Patent Claims

1. A closure with a thermal safeguard function, comprising

1.1 a closure body (1) for sealing a cavity (10) that is to be closed;

1.2 a fusible safeguard element (2), which is inserted into closure body (1), and keeps at least indirectly closed a through-opening (1.1), which is formed in closure body (1);

characterized by the following features:

1.3 closure body (1) comprises a bushing (3) with a continuous bore (3.1) and

1.4 bushing (3) is inserted into the through-opening (1.1) of closure body (1) at an axial end (1.3) in such a way that the continuous bore (3.1) and the region of the through-opening (1.1) that is axially adjacent to bushing (3) are aligned flush with each other;

1.5 fusible safeguard element (2) completely fills the continuous bore (3.1) of bushing (3) over the entire cross section thereof along a pre-given axial length.

2. A closure with a thermal safeguard function, comprising

2.1 a closure body (1) for sealing a cavity (10) that is to be closed;

2.2 a fusible safeguard element (2), which is inserted into closure body (1), and a through-opening (1.1), which is formed in closure body (1),

2.3 closure body (1) has a first axial end (1.2) and a second, opposite axial end (1.3), whereby the through-opening (1.1) extends in the axial direction from the first axial end (1.2) to the second axial end (1.3) and is closed in the region of the second axial end (1.3) by fusible safeguard element (2),

characterized by the following features:

2.4 closure body (1) is provided with a cylindrical or essentially cylindrical

axial prolongation (1.4) in the region of its second axial end (1.3), which has a wall thickness that is reduced relative to the wall thickness of the remaining closure body (1.1) and which forms an axial section of the surrounding outer wall of the through-opening (1.1), whereby fusible safeguard element (2) is enclosed over at least half of its axial length by axial prolongation (1.4) in the circumferential direction.

3. The closure according to one of claims 1 or 2, further characterized in that fusible safeguard element (2) is a fusible solder, particularly a eutectic fusible solder, which is soldered in the through-opening (1.1) or the continuous bore (3.1).

4. The closure according to claim 3, further characterized in that the fusible solder has an axial length of at most 9 millimeters, particularly a length of 8 millimeters.

5. The closure according to claim 4, further characterized in that the fusible solder has a length of at least 5 millimeters.

6. The closure according to one of claims 3 to 5, further characterized in that the through-opening (1.1) and/or the bushing is formed at its/their axial end, in which the fusible solder is arranged, with a step-shaped expansion of the cross section, so that a portion of the fusible solder or of bushing (3) comes to rest in the axial direction against closure body (1) or bushing (3) in such a way that an axial thrust force can be transmitted from the fusible solder and/or the bushing onto the closure body.

7. The closure according to claim 1 and, in particular, according to one of claims 3 to 6, further characterized in that a cavity is formed between bushing (3) and closure body (1).

8. The closure according to one of claims 1 to 7, further characterized in that the through-opening (1.1) and, in particular, the continuous bore (3.1) has a minimum diameter of at least 11 millimeters over its/their entire axial length.

9. The closure according to one of claims 2 to 8, further characterized in that the axial prolongation (1.4) has a wall thickness of at most 2.5 millimeters, particularly a wall thickness in the range of 1 millimeter to 2 millimeters or less.

10. Use of a closure according to one of claims 1 to 9 in a hydrodynamic turbomachine, particularly a hydrodynamic coupling, a hydrodynamic brake, or a hydrodynamic converter for sealing a working chamber (20) of the hydrodynamic turbomachine from the surroundings.